



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,745	02/28/2005	Onn Haran	2823/23	2037
44596 7590 09/03/2009 DR. MARK M. FRIEDMAN C/O BILL POLKINGHORN - DISCOVERY DISPATCH 9003 FLORIN WAY UPPER MERLBORO, MD 20772				
EXAMINER NGUYEN, PHUONG CHAU BA				
ART UNIT 2416		PAPER NUMBER		
NOTIFICATION DATE 09/03/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mark\_f@friedpat.com

friedpat@yahoo.com

sharon\_l@friedpat.com

### Office Action Summary

**Application No.**

10/525,745

**Applicant(s)**

HARAN ET AL.

**Examiner**

PHUONGCHAU BA NGUYEN

**Art Unit**

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6-24-9 RCE.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 2-5, 10 and 12-17, 19-20 is/are allowed.
- 6) ☒ Claim(s) 6-8 and 11 is/are rejected.
- 7) ☒ Claim(s) 1, 6, 9 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1-11-9 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Claim Objections***

1. Claims 1, 6 and 18 are objected to because of the following informalities: "LLID" should be changed to --- Logical Link Identifications (LLID) --- . Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyoda (6,647,210) in view of Blahut (6,807,188).

Regarding claim 6,

Toyoda discloses in a passive optical network that includes an optical line terminal (OLT) and a plurality of optical network units (ONUs), a method for registration of multiple entities belonging to a specific ONU comprising the steps of: checking, by the OLT, of a flags field (flag 12a-fig.6) residing inside a registration request message received from the specific ONU (col.7, lines 32-56).

Toyoda does not explicitly disclose that based on said checking, deciding, by the OLT, to register an entry selected from the group consisting of a user, a group of users and a service and associated with the registration request as an entity of said specific

ONU selected from the group consisting of a first entity and an additional entity, the decision to register including providing a specific LLID to each entity of said specific ONU. However, in the same field of endeavor, Blahut discloses in figure 4b-407 & 5a-503 for assigning/setting ONU ID to ONUID. Therefore, it would have been obvious to an artisan at the time of the invention was made to apply Blahut's teaching of assigning ID to a specific ONU 106-fig.1 to ONUID with the motivation being to transmit out-of-band tone in the assigned time slot. Also, it is inherent that every network comprises an OLT and plurality of ONUs comprising a first and second entities (i.e., fig.1), wherein each registers as an entity associating with a user, a group of users, and a service for being able to communication between each other (i.e., OLT and ONUs).

Regarding claim 7, Toyoda further discloses wherein said step of checking includes checking if the flags field marks an additional registration (i.e., new equalization delay parameter, col.7, lines 32-56).

4. Regarding claim 8, Toyoda further discloses wherein said mark of an additional registration includes a newly defined reserved value (i.e., new equalization delay parameter, col.7, lines 32-56), and wherein said step of deciding includes concluding that said entity is said additional entity of said specific ONU (flag of new equalization delay parameter for either the first entity (ONU1), the second entity (ONU2), or the N-1 entity (ONU(n-1))-emphasis added, col.7, lines 32-56).

5. Claims 6-8, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyoda (6,647,210) in view of Blahut (6,807,188) as applied to claims 6-8 above, and further in view of the admitted prior art (background of invention, paragraphs 0003-0013).

Regarding claim 11, Toyoda does not explicitly wherein said registration request message is defined according to the IEEE 802.3 specification. However, in the same field of endeavor, the admitted prior art discloses IEEE 802.3 standard having registration request including a flag field. Therefore, it would have been obvious to an artisan at the time of the invention was made to apply the admitted prior's teaching of IEEE 802.3 standard to Toyoda-Blahut's system to determine the operations requested by the register request message.

***Allowable Subject Matter***

6. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 1-5, 10, 12-18 are allowed over the prior art.

8. The following is an examiner's statement of reasons for allowance:

Regarding new claim 19, the prior art fails to teach in a passive optical, network that includes an optical line terminal (OLT) and a plurality of optical network units (ONUs), a method for registration of multiple entities belonging to a specific ONU comprising the steps of : "a) checking, by the OLT, if a registration request message received from the specific ONU belongs to a certain grant; and c) deleting all previously registered entities for said specific ONU," which is considered in combination with other limitations, as specified as, in the independent claim 19.

Regarding new claim 20, the prior art fails to teach in a passive optical network that includes an optical line terminal (OLT) and a plurality of optical network units (ONUs), a method for registration of multiple entities belonging to a specific ONU comprising the steps of: "a) checking, by the OLT, of a flags field residing inside a registration request message received from the specific ONU; wherein said step of deciding includes deciding that a flags field value is an old value; and c) deleting all previously registered entities for said specific ONU," which is considered in combination with other limitations, as specified as, in the independent claim 20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

9. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUONGCHAU BA NGUYEN whose telephone number is (571)272-3148. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PHUONGCHAU BA NGUYEN/  
Examiner, Art Unit 2416

/Ricky Ngo/  
Supervisory Patent Examiner, Art  
Unit 2416

Application/Control Number: 10/525,745  
Art Unit: 2416

Page 7